

WHAT IS CLAIMED IS:

1/ A folder module for folding a flexible intraocular implant for injection into the eye of a patient, the module comprising:

- 5 - two jaws that are movable relative to each other, each jaw having a folder wall constituted by a portion of a cylindrical surface and a plane wall secured to the folder wall, the two plane walls lying in parallel planes;
- 10 - a pivot axis orthogonal to the plane walls to control relative pivoting movement of one jaw relative to the other;
- one of the jaws being capable of occupying relative to the other jaw a first position in which the
15 plane walls are spaced apart from each other, thereby enabling the implant to be put into place on the bottom plane wall; a second position in which the plane walls face each other, whereby the folder walls and the plane walls define a confinement volume for the implant; and a
20 third position in which the folder walls meet each other so as to define a substantially cylindrical volume forming a folder chamber enabling the implant to be finally folded.

25 2/ A folder module according to claim 1, wherein the first of said jaws further comprises two side walls parallel to said pivot axis and secured to the edges of the plane wall of said jaw, such that when the two jaws are in their second relative position, the plane walls,
30 the folder walls, and the side walls together define a storage space in which the implant can be held in a non-folded state.

35 3/ A folder module according to claim 2, wherein the distance between the two plane walls is greater than the thickness of the implant.

4/ A folder module according to claim 3, wherein the distance between the plane walls lies in the range 1 mm to 3 mm.

5 5/ A folder module according to claim 2, wherein said jaws further comprise means for holding them in their second relative position, whereby the implant can be held in said storage volume.

10 6/ A folder module according to claim 2, wherein said jaws further comprise holding means for holding them in their third relative position, whereby the implant can be held in the folded state in the folder chamber so as to enable the implant to be injected into the eye of a
15 patient.

7/ A folder module according to claim 2, wherein said first jaw further comprises an injection passage at one of the ends of said folder chamber on an axis that
20 substantially coincides with the axis of the cylindrical volume defined by the folder walls when said two jaws are in their third relative position.

8/ A folder module according to claim 7, wherein said
25 first jaw further comprises a guide passage opening out to the second end of the folder chamber and having the same axis as the folder chamber, and a pusher member slidably mounted in the guide passage for pushing the implant in the folded state into said injection passage.

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9/ A flexible implant injector comprising:

- a folder module comprising:

- two jaws that are movable relative to each other, each jaw having a folder wall constituted by a
35 portion of a cylindrical surface and a plane wall secured to the folder wall, the two plane walls lying in parallel planes;

- a pivot axis orthogonal to the plane walls to control relative pivoting movement of one jaw relative to the other;

5 - one of the jaws being capable of occupying relative to the other jaw a first position in which the plane walls are spaced apart from each other, thereby enabling the implant to be put into place on the bottom plane wall; a second position in which the plane walls face each other; whereby the folder walls and the plane
10 walls define a confinement volume for the implant; and a third position in which the folder walls meet each other so as to define a substantially cylindrical volume forming a folder chamber enabling the implant to be finally folded;

15 - said first jaw further comprising: an injection passage at one of the ends of said folder chamber on an axis that substantially coincides with the axis of the cylindrical volume defined by the folder walls when said two jaws are in their third relative
20 position; and a guide passage opening out to the second end of the folder chamber and having the same axis as the folder chamber, and a pusher member slidably mounted in the guide passage for pushing the implant in the folded state into said injection passage;

25 - an injector body including a housing for receiving said folder module, an injection cannula for extending said injection passage when said folder module is in place in said housing, and an axial guide duct for extending said guide passage when said folder module is
30 in place in said housing; and

 - a piston whose rod is slidably mounted in said axial guide duct, whereby the end of the rod of said piston can co-operate with one end of the pusher member of said folder module.

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10/ A flexible implant injector comprising:

- a folder module comprising:

- two jaws that are movable relative to each other, each jaw having a folder wall constituted by a portion of a cylindrical surface and a plane wall secured to the folder wall, the two plane walls lying in parallel planes;

- a pivot axis orthogonal to the plane walls to control relative pivoting movement of one jaw relative to the other;

- one of the jaws being capable of occupying relative to the other jaw a first position in which the plane walls are spaced apart from each other, thereby enabling the implant to be put into place on the bottom plane wall; a second position in which the plane walls face each other, whereby the folder walls and the plane walls define a confinement volume for the implant; and a third position in which the folder walls meet each other so as to define a substantially cylindrical volume forming a folder chamber enabling the implant to be finally folded;

- a cannula extending a first end of said confinement chamber to guide the implant in its folded state;

- a guide passage extending a second end of said guide chamber; and

- a piston slidably mounted in said guide passage to push the implant in the folded state from said folder chamber into said cannula.